Dr. O. G. Villard
Stanford Electronics Labes

Dear Mike :

Some comments on Needles.

I don't disagree at all with the conclusions of the committee though I would have liked to have seen some very explicit statement on the fate after reentry of particles fx of some indicated compositions. The one point I would add is this— if there are 'international' implications, some of our friends may be looking for trouble, and we ought to foresee some of their strategy. This was the main reason I suggested including some characteristic 'marker' substance in the needles— not that I expect we will ever be able to find one again in the terrestrial haystack, but to be able to be able to rule out any claims to that effect if they are made. Even in domestic law, you might find suits from some cranks could be forestalled more readily if there were some very explicit advance provision for identifying a needle, even after some deformation.

This would cost almost nothing: I had in mind adding some isotope with unique mass number to whatever material you used.

-Is-there-amy-way

Will individual needles incandesce visibly on reentry? If so, would there be some point to using an element (Na. K. Sr?) that would make this more characteristic; or would this be insignificant part of the emission?

Yours,

Joshua Lederberg